

REMARKS/ARGUMENTS

Claims 1-22 are pending in the application. Claims 1, 3, 5, 10-12, 14, 16, 19, and 22 are amended herein. The Applicant hereby requests further examination and reconsideration of the application in view of the foregoing amendments and these remarks.

Claims 10 and 22 are amended to correct an inadvertent typographical error. The Applicant submits that these amendments are not made to overcome any prior art rejections.

On page 2 of the office action, the Examiner rejected claims 1-22 under 35 U.S.C. 112, second paragraph, as being indefinite. In response, the Applicant has amended the claims to replace the phrase "without amplitude information" with the phrase "having the amplitude information converted into phase modulation." Support for these amendments is found in Figs. 4 and 5, where the amplitude A of the input signal is converted into phase-modulation terms of the two pre-distorted signals that get separately applied to amplifiers PA1 and PA2. The Applicant submits therefore that the rejections of claims under Section 112, second paragraph, have been overcome.

On page 2, the Examiner rejected claims 1-2 and 11-13 under 35 U.S.C. 102(b) as being anticipated by the Raab patent. On page 3, the Examiner rejected claims 3-4 and 14-15 under 35 U.S.C. 103(a) as being unpatentable over the Raab patent. On page 3, the Examiner also rejected claims 8-10 and 20-22 under 35 U.S.C. 103(a) as being unpatentable over the Raab patent in view of the Raab article. For the following reasons, the Applicant submits that all of the pending claims are allowable over the cited references.

According to currently amended claim 1, the input signal is converted into two pre-distorted signals having the amplitude information converted into phase modulation. The two pre-distorted signals are separately amplified, and the two amplified, pre-distorted signals are combined to generate the linearized amplified output signal. The Raab patent does not teach or even suggest such a combination of features.

In particular, in Fig. 40 of the Raab patent, subprocessor 221A converts an input signal into an envelope signal 222A (having amplitude information) and a phase-modulated carrier 222B (having no amplitude information). Envelope signal 222A drives amplitude modulator 223, and envelope signal 222A drives RF power amplifier 224, where the output of amplitude modulator 223 varies the amplitude of the signal produced by amplifier 224.

Similarly, Raab's subprocessor 221B converts the input signal into an envelope signal 222C (having amplitude information) and a phase-modulated carrier 222D (having no amplitude information). Envelope signal 222C drives amplitude modulator 225, and envelope signal 222D drives RF power amplifier 226, where the output of amplitude modulator 225 varies the amplitude of the signal produced by amplifier 226.

Significantly, Raab's Fig. 40 does not teach or even suggest the conversion of an input signal into "two pre-distorted signals having the amplitude information converted into phase modulation."

For all these reasons, the Applicant submits that claim 1 is allowable over the Raab patent. For similar reasons, the Applicant submits that claims 11 and 12 are allowable over the Raab patent. Since the rest of the claims depend variously from claims 1 and 12, it is further submitted that those claims are also allowable over the Raab patent. The Applicant submits therefore that the rejections of claims under Sections 102(b) and 103(a) have been overcome.

In view of the above amendments and remarks, the Applicant believes that the now-pending claims are in condition for allowance. Therefore, the Applicant believes that the entire application is now in condition for allowance, and early and favorable action is respectfully solicited.

Respectfully submitted,

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